In the claims:

Please cancel Claim 6, and amend Claims 1, 4, and 7 as follows:

1. (Currently amended) A modified α-glucosidase enzyme, the modified form differing from the wild-type barley α-glucosidase by proline being substituted for the threonine residue found in the wild-type sequence in the motif Val-Asn-Phe-Thr, the threonine located at residue 340, the modified enzyme retaining activity at a higher temperature than the wild-type enzyme.

2. (Original) A DNA sequence which encodes the expression of the enzyme of claim 1.

3. (Original) A transgenic host which expresses the DNA sequence of claim 2 to produce the modified barley α-glucosidase.

4. (Currently amended) A constructed DNA sequence including a protein coding region encoding a modified barley α-glucosidase enzyme, the modified barley α-glucosidase differing from the wild-type barley α-glucosidase by the presence of a proline residue at residue 340 in substitution for the threonine residue located in the motif Val-Asn-Phe-Thr in the wild-type protein.

5. (Original) A transgenic host which expresses the constructed DNA sequence of claim 4.

6. (Canceled)

7. (Currently amended) A modified α-glucosidase enzyme, the modified enzyme differing from the wild-type barley α-glucosidase by an amino acid modification which confers thermal stability on the modified enzyme so that the modified enzyme retains enzymatic activity at a higher temperature than the wild-type enzyme, ~~as claimed in claim 6 wherein~~ the modification being ~~is~~ selected from the group consisting of adding a proline and removing an aspartate at residue 101, ~~removing~~ deleting an aspartate from residue 105, ~~removing~~ deleting an aspartate from residue 369, adding N-glycosylation site and ~~removing~~

deleting an aspartate from residue 372, adding N-glycosylation site to residue 463, ~~removing~~ deleting an aspartate from residue 508, adding N-glycosylation site and ~~removing~~ deleting an aspartate from residue 694, and ~~removing~~ deleting an aspartate from residue 764.

8. (Original) A DNA sequence which encodes the modified α-glucosidase enzyme as claimed in claim 7.

9. (Previously Amended) A method of making a mutant form of the enzyme barley α-glucosidase comprising the steps of:

(a) constructing a mutant gene sequence encoding a mutant form of the α-glucosidase enzyme;

(b) cloning the mutant gene sequence into an expression vector;

(c) expressing the protein encoded by the expression vector to produce the protein encoded by the mutant gene sequence;

(d) recovering the protein produced; and

(e) testing the protein for both α-glucosidase activity and for thermostability; wherein the mutant gene sequence encoding a mutant protein has at least one mutation selected from the group consisting of adding a proline and removing an aspartate at residue 101, removing an aspartate from residue 105, removing an aspartate from residue 369, adding N-glycosylation site and removing an aspartate from residue 372, adding N-glycosylation site to residue 463, removing an aspartate from residue 508, adding N-glycosylation site and removing an aspartate from residue 694, and removing an aspartate from residue 764.